REMARKS

1. Objection to Drawings

The Examiner has maintained an objection to the drawings under 37 CFR 1.83(a). Applicant continues to traverse this rejection and respectfully points out the language of the rule in question:

> The drawing in a nonprovisional application must show every feature of the invention specified in the claims. ***However, conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical symbol or a labeled representation (e.g., a labeled rectangular box).***

37 C.F.R 1.83 (a).

As Applicant has previous asserted, external device 121 as illustrated in FIG. 2 satisfies this rule as a labeled representation. The Examiner is again directed to the specification, particularly, page 9 first paragraph and page 10 lines 8-14. An additional drawing illustrating in some graphic detail ECG electrodes coupled to a patient's skin is not necessary to a proper understanding of the claimed Invention.

2. Invalid Rejection/Improper Final Rejection

The Examiner states at paragraph 11 of the Office Action, that "not disclosed by [Cohen] is the use of the EGM signal and the pressure value to determine the MPAP. These are elements of e.g., claim 1. Since the Examiner has affirmatively stated that these elements are not taught, the rejection under section 102, of e.g., claim 1 is improper on its face. The rejection must be withdrawn and the finality must be withdrawn.

Applicant raised this issue in the previous response and the Examiner has not addressed it herein and has maintained the rejection under section 102.

Applicant respectfully requests clarification, withdrawal of the rejection and of the finality.

3. Prior Art Rejections

Applicant's remarks from the previous response are herein incorporated by reference.

In the present Office Action, the Examiner asserts that:

> All of the particulars of the claims are provided for: Specifically, the first sensor 20, a first circuit 18 and a processing circuit 12 that receives these two inputs. The system determines therefrom the mean pulmonary arterial pressure (note column 4, lines 23+) through an internal algorithm.

Claim 1 includes:

1. A system for determine mean pulmonary arterial pressure of a patient, comprising:
a first sensor located in a ventricle of a heart to measure pressure;
a first circuit to measure electrocardiogram (EGM) signals; and
a processing circuit coupled to receive signals indicative of the pressure and the EGM signals, and to determine mean pulmonary arterial pressure (MPAP) therefrom.

Thus, a sensor is disposed within the ventricle and measures pressure there. That pressure measurement and EGM data is used to determine MPAP, which is a specifically defined pressure in a location of the heart other than the ventricle; that is, other than where the claimed pressure sensor is located.

The Examiner is respectfully reminded that both the claims and the reference must be considered as a whole. Merely because Cohen discusses measuring pressure in a ventricle and separately addresses measuring MPAP does not teach, contrary to the Examiner's assertion, that ventricular pressure along with EGM data is used to determine MPAP.

In the previous response, Applicant requested specific support within the reference to the contrary. The Examiner has cited, Col. 4 lines 23+, which state:

> The system and method of the invention as disclosed herein may involve mean pulmonary artery pressure (MPAP), mean pulmonary vein pressure (MPVP) or mean pulmonary capillary wedge pressure (MPCWP). A parallel configuration algorithm in which rate and hemodynamic criteria function simultaneously is also proposed; however, continuous pressure change determination would probably be less energy efficient. Either configuration of algorithm could be adapted to a single catheter consisting of a pressure transducer in either the right atrium or right ventricle and an R-wave sensing electrode or pair of electrodes at the catheter tip in the right ventricle.

The Examiner then asserts that "this citation clearly states placing the sensor in the right ventricle or the left ventricle to calculate MPAP, MPVP and MPCWP." Applicant respectfully asserts that is factually incorrect.

Is the sole basis for the Examiner's contention really just that this quoted section lacks a paragraph separation at line 26? It is quite clear that the "paragraph" beginning at Col. 3, line 48 and ending at Col. 4, line 52 contains multiple discreet concepts. The notion that "a single catheter consisting of a pressure transducer in either the right atrium or right ventricle and an R-wave sensing electrode or pair of electrodes at the catheter tip in the right ventricle" clearly and unambiguously relates to the discreet concept of being able to sense both rate data and hemodynamic data, presented immediately prior. There is absolutely no support to assert that ventricular pressure in combination with EGM data is used to determine MPAP.

Again, Applicant respectfully asserts that the reference must be considered as a whole. The rate data utilized by Cohen is used to determine when to look at pressure data, not as a means to determine pressure.

Even if there were more to this than some minor grammatical ambiguity, using EMG data and ventricular pressure data to determine MPAP is not some "given" concept. Where in the reference is the teaching of how to take ventricular pressure data, utilize EGM data and determine MPAP? It does not exist. Thus,

the Examiner's position is unsupportable and any minor grammatical ambiguity that might be perceived from the reference is remedied by considering the whole of the reference in context as required by the rules of practice.

Applicant has asserted and the Examiner has not contradicted with support the fact that any pressure measurement made by Cohen is made directly. Thus, if MPAP is sought, a pressure sensor is placed directly into the pulmonary artery (FIG. 2H). With such capabilities, there is no need or motivation to determine MPAP based on other factors. There is certainly no suggestion to do so and no teaching as to how to do so; specifically, utilizing ventricular pressure and EGM data to determine MPAP.

The rejection must be withdrawn. Should the Examiner still continue to maintain such a rejection, Applicant again requests specific support (and explanation) within the reference teaching taking ventricular pressure and using that ventricular pressure along with EGM data to determine MPAP. To summarize, Cohen teaches obtaining MPAP directly using a sensor within the pulmonary artery. Cohen separately and independently discusses other pressure measurements including ventricular pressure. Cohen separately and independently discusses using rate data to determine when to monitor pressure data.

Applicant respectfully asserts that the pending claims are in condition for allowance and notice of the same is solicited.

Respectfully submitted,

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